This past July, the Tampa Police Department introduced a computerized surveillance system to augment its efforts to monitor the streets of a downtown business and entertainment district for potential miscreants.\textsuperscript{1} The system, built by Visionics Corporation of New Jersey and offered free to local municipalities for a year, consists of a network of security cameras placed in prominent public areas and equipped with a face-recognition software package known as FaceIT. Each facial image scanned by the closed circuit cameras in the system is broken down by FaceIT into a grid of 80 reference points, including factors such as the distance between the eyes of each subject scanned. If the system comes up with a match of more than a dozen of these points against an image in its database – which includes 30,000 faces – it signals this match to system operators. The operators, members of the police department who are housed in a monitor-lined bunker somewhere in the downtown area, then make their own decision concerning the computer match, and, if the result is positive, radio a uniformed officer to investigate and potentially make an arrest. The system has been in operation since 1998 in the Borough of Newham in London’s East End, which claims that crime has been significantly reduced as a result of its deployment of the surveillance technology. While the economic savings promised by the Visionics Corporation add to the appeal of the system, FaceIT has raised significant objections. Most immediately, the reduction in beat policing and the redeployment of the remaining officers to security bunkers militates against the forms of engaged and responsive community policing that have proven effective deterrents to crime in cities such as New York during the 1990s. The spread of FaceIT
technology is more troubling, however, given its potential curtailment of civil liberties. With the introduction of this technology, the state has dramatically extended its transformation of public space into a scanned and controlled grid. This immeasurably heightened technology of state control threatens to intensify contemporary trends towards the privatization and segregation of social spaces. The similarities between this new “biometric” technology and previous technologies of colonial classification and control is hard to ignore given the increasing prominence of forms of spatial apartheid today.

*Relocating the Remains*, Black British artist Keith Piper’s virtual installation, begins like the FaceIT system with computerized images of a human body. Navigating through the fleshlessly numinous space of the Internet to Piper’s website, one is confronted with a sequence of starkly corporeal images generated by an animated gif file:

**Insert unmapped.gif** (link to [http://www.iniva.org/piper/UnMappedBody.html](http://www.iniva.org/piper/UnMappedBody.html))

If one clicks through these images, a display appears of ghostly ethnographic renderings of bodies drawn from the nineteenth century phenomenological disciplines through which racial difference was calculated. Like the blank spaces in the map of Africa by which Joseph Conrad was famously mesmerized as a child, the bodies of non-European peoples exerted a powerful fascination on the public during Britain’s imperial era. As Anne McClintock has demonstrated, the museum where ethnographic artifacts apparently similar to Piper’s were housed became the exemplary institution of Victorian imperial culture. It was here that collections of objects such as skulls, skeletons and fossils were displayed as tokens of the archaic stages of life (McClintock 40). For Victorian Britain, these fetishistic displays seemed to legitimate the narrative of cultural progress and superiority that underpinned empire. Employing cutting-edge digital technology, Keith Piper recreates this anachronistic space in order to probe the extent to which tropes of
progress and difference operate in the present. As I will show, his work provides a stinging critique of the wide-eyed utopianism evident in prevalent contemporary reactions to digital technologies and the “New Economy” they are helping fuel.

Keith Piper’s multi-media productions over the last two decades have interrogated dominant representations of race, culture, and nation in British history, focusing in particular on the complex affiliations of black diasporic identity. As a member of the iconoclastic BLK Arts Group in the early to mid-1980s, Piper challenged the British Left’s attachment to a notion of culture that elided racial difference and hence rendered black identity invisible.² Piper’s work also consequently pinpointed the strategic acts of forgetting that have largely banished the history of slavery from British public life. As critics such as Kobena Mercer have argued, this history makes nonsense of the narrow geo-political boundaries of the nation-state and of the insular definitions of identity that attend it (22). Since disrupting the established British art scene through BLK Arts Group exhibitions, Piper has gone on to create a corpus of works that offer a potent excavation of the modes of colonial discourse in British history. Initially mounted in 1997 at London’s Institute for International Visual Arts (InIVA) - a body funded by the British government to challenge the lack of diversity in the world of visual arts - Relocating the Remains transfers much of this corpus to digital form. This shift makes the important and previously scattered body of his work created over the last decade uniquely accessible. Relocating the Remains also provides a synthetic consideration of the parallels between contemporary information technologies and the media of representation and power deployed in a more openly colonial era.

Through its exploration of questions pertaining to new media and colonial discourse, Relocating the Remains underlines the enduring need for a sustained critique of digital media
theory. Piper’s work, and, by extension, my own argument in this article, is hardly the first to question utopian claims concerning new media. In addition, Piper is certainly no Luddite; indeed, *Relocating the Remains* demonstrates his masterful assimilation of contemporary digital media with many breathtaking aesthetic effects. Yet Piper’s exploration of the dystopian character of contemporary digital technologies in this work does challenge the notion that such new media are inherently emancipatory. As María Fernández has argued in her recent call for an interrogation of new media by postcolonial theory, the utopian rhetoric that has characterized much digital media theory obscures the practical role played by new technology in processes of flexible production that contribute to economic and social inequality on both a local and global level (12). Focused predominantly on the purportedly liberatory forms of communication offered on-line, digital media theory has tended to underestimate the role of technology in perpetuating existing forms of inequality and generating new ones. This is particularly ironic given the fact that social inequality has grown more pronounced since the advent of the modern digital technologies.

Since digital technology is one of the primary engines of globalization, we need theoretical frameworks that attend to the modes of power inscribed in the code that directs such new technology. The impact of new media must, in other words, be seen not simply as a product of the social uses made of such technology, but also of the values encoded into the very software that drives digital media. By juxtaposing the forms of colonial discourse that proliferated during the era of high imperialism with contemporary discourses of otherness, surveillance, and control, Keith Piper’s *Relocating the Remains* raises thorny questions about the differential impact of digital media. His interactive digital work underlines the homologies among colonial discourses, contemporary cyber-libertarian dogma, and neo-liberal accounts of globalization today. As a
result, Piper’s digital texts extend the purview of postcolonial theory, which has focused predominantly on discourse and power in traditional literary texts. It is by turning our attention to both the rhetorical constructions through which information technologies come to be socially understood and the technical architectures through which such technologies shape society that digital media workers like Keith Piper shed light on the processes of social exclusion, control, and containment that may be perpetuated by such technologies. Of course, the social role of digital media remains open to contestation; after all, code is still written by people. By adapting digital technology to his own critical ends, Piper underlines the imperative to intervene in contemporary debates about the role of technology in our common future.

The Persistence of Colonial Discourse in Cyberspace

In his “Declaration of the Independence of Cyberspace,” former rancher, Grateful Dead lyricist, and prominent cybercultural theorist John Perry Barlow writes:

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather...Cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions (Barlow).

Barlow’s pose as an ambassador from the virtual domain of cyberspace reflects the strong strain of techno-transcendentalism that runs through contemporary cyberculture. For cyber-libertarians such as Barlow and the coterie who publish regularly as Mondo 2000, electronic telecommunication has made real the dreams of countercultural visionaries such as Marshall McLuhan and Pierre Teilhard de Chardin. Indulging in some of the most romantic rhetoric of the 1960s, these telematic prophets articulated a dream of using technology to break free of all
limits, from those imposed by traditional political forms to those associated with the stubborn materiality of the flesh (Dery 45).

The cyber-libertarian ethos that has developed from these countercultural roots has become the dominant discourse not just in cybercultural circles, but also among the free marketeers of Silicon Valley, Seattle, and Washington, D.C. The roots of this conjunction lie, I would argue, in Daniel Bell’s path-breaking account of “post-Industrial society.” In works written long before computer technology became widely available to the general public, Bell pointed to an explosive convergence of computer and telecommunications. According to Bell, this development would lead ultimately to a globally connected communications grid (Kumar 10). The speed of the computer would thus help create a radically new space-time framework for society, with the industrial era’s primary social factors (capital, labor and the state) being replaced by knowledge and information as society’s central variables. Early cyber-utopians such as Stonier and Matsuda drew on Bell’s prognostications to describe a future world in which digital technology eliminates the need for centralized politics and administration (Kumar 14). Participatory democracy and local citizen control would replace the impersonal and inefficient leviathan of the industrial era. Much of this utopian optimism concerning the post-industrial empowerment of the grassroots was, unfortunately, appropriated by neo-liberal apologists and politicians intent on dismantling the welfare state following the Reagan-Thatcher revolution. Newt Gingrich’s firm adherence to the “Third Wave” theories of the Tofflers is perhaps not so surprising given the post-industrial utopians’ argument that technology would destroy inequality and hence make the redistributive arm of the state obsolete. Of course, this utopian rhetoric has been far more broadly disseminated than Capitol Hill. Terry Harpold and Kavita Phillip have, for instance, dissected the migration of such erstwhile utopian rhetoric into Intel’s bunny-suit
ads, which erase all forms of inequality from their cheery depictions of the high tech silicon chip production line.

Fantasies of technological transcendence have also resonated powerfully – at least until the recent bursting of the Internet bubble - because of the ambiguous class status of contemporary workers in the information technology sector. Well paid and relatively empowered by their mastery of contemporary information technology, such workers are nevertheless tied to contracts that give them absolutely no job security while also discouraging any form of collective solidarity (Barbrook and Cameron 2). The recent crash of the dot-com industry has to a certain extent revealed the vulnerability of this class of workers. Yet, as the most privileged sector of the labor force, these technological laborers have predominantly been complicit with the thoroughgoing transformation of the counter-culture’s anti-authoritarian ideals to the entrepreneurial goals of the “free market.” Underlying the vicissitudes of tech stocks is a more fundamental shift in the mode of production. In a transformation as fundamental as the introduction of the steam engine, the new digital technologies are encoding and absorbing workers’ physical and mental skills (Davis 40). This process of mental Taylorization, which has as its telos the elimination of human beings from production processes of all kinds, is reshaping social relations globally. As Jim Davis notes, the impact of digital technology has thus far taken the form not of increased unemployment but rather of a growth in economic polarization (43).

Buoyed up by their temporarily privileged class status as core workers in the new information economy, what Barbrook and Cameron call the “virtual class” see digital culture as a new realm. For critics such as Nicholas Negroponte, a professor at MIT and frequently editorialist for the neo-liberal cyberzine *Wired*, the geo-political boundaries and limitations of traditional, terrestrial governments have increasingly little hold. One problem with this attitude
is that it treats the current structure of communications media such as the Net as ahistorical, essentialized forms. Witness Barlow’s description of cyberspace as “natural,” of all things. Mark Poster also makes this mistake when, in the course of an illuminating discussion of Habermasian theories of the public sphere and the Internet, he argues that “the salient characteristic of Internet community is the diminution of prevailing hierarchies of race, class, age, status, and especially gender” (8). While this may be true of the Net in its present incarnation, it will not necessarily remain true for long. The architecture of the Net and the novel forms of communication and civil space that are a product of this architecture should not be taken for granted in the way that cyber-libertarians as well as critics such as Poster encourage us to do. Indeed, the fact that Barlow’s “Declaration” was penned in response to the more draconian provisions of the U.S. Telecommunications Reform Act of 1996 suggests that the vaunted freedom of cyberspace may be threatened by precisely the formations whose death-knell Barlow claims to be sounding. As Tim Jordan notes, calls for users of the Internet to be left alone to establish their own forms of governance have little hope of succeeding since the importance of digital space to offline socio-economics means that online and offline services cannot be disentangled (214). Unless we examine the potential forms of regulation and control that are embedded within the architecture of the Net, we will stand little chance of assessing and articulating meaningful forms of democratic cybercitizenship. This is a particularly urgent task given the broader impact of the information revolution, which is one of the prime factors responsible for increasingly polarized, fragmented, and unstable social formations on both a national and a global level.

The neo-liberal rhetoric that has accompanied that social changes has a direct equivalent in descriptions of the Net. Indeed, the spatial metaphor employed by Barlow in his manifesto is
part of a much broader discourse, one in which cyberspace becomes a new frontier, a wild west in which electronic cowboys like the protagonist of William Gibson’s *Neuromancer* and billionaire entrepreneurs like Bill Gates are the new pioneers. This boundary metaphor permeates contemporary discussions of cyberspace: from the Electronic Frontier Foundation, a watchdog group that works to protect first amendment rights on the internet, to books like Peter Ludlow’s *High Noon on the Electronic Frontier*, cyberspace is repeatedly represented as virgin territory ripe for colonization. In a recent striking analysis, Virginia Eubanks has linked this contemporary notion of the new frontier to Frederick Jackson Turner’s essay of 1910, “Pioneer Ideals and the State University” (Eubanks). Assessing the inaugural moments of the U.S.’s enduring obsession with technology and progress, Turner equated the pioneer ideals that had driven relentless westward expansion with the aims of the rapidly developing industrial technoscience of the period. Electronic homesteaders such as Barlow are, then, but the latest in a long line of American intellectuals to employ the frontier metaphor to legitimate the imperatives of technologically driven capitalism.

We might find this metaphor’s lasting power surprising given the massive colonial violence associated with westward expansion and Manifest Destiny. Yet the blindness to exclusionary social practices that the continuing circulation of this term underlines is a permeating feature of cyber-libertarian discourse. Granted, the code that forms the Net’s architecture does help to create remarkable new forms of social interaction by annihilating physical space, generating non-hierarchical forums in which novel interactions may take place, and allowing an unsurpassed degree of anonymity. However, the notion of status bracketing that is frequently associated with Net-mediated identities is highly dubious. Simply because on-line communities do not feature ‘visual’ markers of difference such as race, class, gender, age, or
physical ability does not mean that there are not substantial preconditions to accessing such communities - computer literacy, leisure time, and wealth, for instance. Moreover, too often ideas about status bracketing are assumed to imply universal, open access. In a world in which three fifths of the 4.4 billion people in underdeveloped countries lack access to basic sanitation let alone computers, the forms of literacy required for fluent use of the Net are clearly the privilege of a numerically small global elite. The fact that English is by far the dominant language on the Net seems a relatively peripheral issue in relation to this much broader question of literacy. Nonetheless, many cyber-theorists continue to talk in terms that imply the universal availability of the Net and other electronic media of communication. In his recently published book *Etopia*, for instance, William J. Mitchell, Dean of M.I.T.’s School of Architecture and prominent cyber-pundit, talks blithely of the electronic oases created at junctions and access points of telecommunications uplinks (31). While he does briefly mention issues of access in this book, Mitchell ignores the implication of his own metaphor: info-oases are inevitably surrounded by info-deserts. The oasis metaphor employed by Mitchell actually characterizes the situation of Africa fairly well since it accurately represents the barren conditions that prevail in most of the rural zones of the continent.

Public discussions of access in the U.S. often ignore and thereby perpetuate the host of material and political barriers that prevent connection in most other parts of world. This makes the liberal language of individual freedom used by debaters in the U.S. largely irrelevant throughout the “developing world” (Harpold 29). As Sean Cubitt has powerfully put it, “any responsible account of cultural activity today must begin in the brutal exclusions of the contemporary world, even more so when we single out for attention the cultural uses of networked communications and digital media. Dependency, today more than ever, is the quality
of human life” (“Orbus Tertium” 3). How does the rhetoric that attends our discussions of the Net help perpetuate what Terry Harpold has called an emerging virtual “dark continent” constituted by the many people around the globe who either lack access to information technology or are at the receiving end of such technology’s more iniquitous uses (37)?

Unravelling the Fictions of Science

Throughout his digital work, Keith Piper cultivates what Walter Benjamin called correspondences. In his Arcades project, Benjamin sought to provide a history of the origins of the present, using archaic images to identify what was historically new about the present and what was not. He termed the confluence of past and present that he wished to isolate a “dialectical image” (Buck-Morss 26). Piper’s work may be seen as analogous to Benjamin’s in that they both aim to represent history in a manner that de-mythologizes the present. One does not have to brush much dust off one’s Barthes to see the fetishization of new technology in cyber-libertarian discourse as a contemporary myth. In the rush to celebrate the apparent transcendence of human limitations, cyber-libertarians and techno-transcendentalists articulate a strong narrative of progress that simply repeats the utopian claims made about previous forms of communications technology, including the telegraph, the radio, television, etc. 4 For instance, the hype that surrounded the advent of the BBC, which was described by its first programme organizer as promising to “weld humanity into one composite whole,” uncannily anticipates utopian pronouncements about the Internet (Allen and Miller, 46). Indeed, the recurrence of what Ernst Bloch would have called “wish images,” utopian signs from the past such as the “open frontier,” suggests the tenuousness of contemporary notions about radical ruptures from the past. Utopian claims concerning new technologies require not awareness of the past,
ironically, but rather obliviousness concerning the inscription of such technologies within unequal social relations that ensure their continued use to promote hierarchy. An awareness of the potentially dystopian uses to which new technologies may be put requires precisely the kind of historical awareness and depth that much contemporary electronic media theory, intoxicated with the notion of historical novelty, denies. Keith Piper’s work, by contrast, demonstrates that there are no value-free technologies. Using correspondences or juxtapositions of colonial and neo-colonial discourse, Piper evokes the historical role of representational technologies in colonial subjugation and suggests that such technologies are still very much at work in today’s polarized global cities.⁵

Such correspondences are woven throughout Piper’s work. However, of the three portals through which one may enter his digital archive - labeled, respectively, Unmapped, Unrecorded, and Unclassified - it is the central one that deals most directly with colonial technologies of representation. Having pointed the cursor at this portal, one is conducted through a door and confronted with a collage that centers on a painting by François August Biard, a nineteenth century French abolitionist.

Insert unrecorded.gif (link to http://www.iniva.org/piper/BairdCollage5.html)

Painted in 1833 - the year that slavery was abolished in the British colonies - Biard’s Slaves on the West Coast of Africa is a strong statement against the institution of slavery. This epic oil painting graphically depicts the miserable conditions of a West African slave market in Freetown Bay, Sierra Leone, showing various kinds of slave traders of the period and the many forms of extreme suffering that they inflicted upon captured Africans.⁶ Although Biard’s strongly abolitionist painting suggests that representation may be used against oppressive social conditions, Piper’s inclusion of the painting in the archive entitled Unrepresented draws our
attention to the processes of objectification at work in the scene depicted by the painting. As he does in other sections of Unrecorded, Piper focuses our attention on the commodification of the black body.7 Like Turner’s Slavers Throwing Overboard the Dead and Dying, Biard’s painting serves as a reminder of the brutal history through which Britain’s global economic hegemony was consolidated.8 Indeed, Piper’s use of Biard here brings to mind Paul Gilroy’s contention in The Black Atlantic that slavery and colonial exploitation were central to the development of English national culture on a material plane. As Gilroy argues, the oppression and exploitation of Africa and her diaspora were also integral to the creation of a unified national identity through the contraposition of Englishness to alterity (9). European modernity has been, in other words, a Janus-faced affair, based both on emancipatory claims and projects as well as on horrendous repression and exploitation. Gilroy’s thesis concerning the dual nature of modernity has particular bearing in relation to digital media. As María Fernández has argued, electronic media theory tends to ignore this split character of modernity in its utopian claims for technology, thereby eliding not simply the violence of history and the role of industrial technology in perpetuating such violence, but also the subaltern histories of resistance that have contested dominant narratives of collective identity (15).

The full extent of Piper’s transformation of the Biard painting only becomes apparent once one finds the links that lie buried within the site’s code. Presented with Biard’s alarming portrait of western power and dehumanization, one is invited to enter into and take apart this narrative by accessing a variety of archives Piper has embedded within the painting. This interactive dimension suggests the need to peel back the triumphal narratives that sustain images of western culture in order to understand the forms of servitude upon which they were historically based. At InIVA’s website, Piper demonstrates the elisions in dominant history with
particular clarity. We are presented here with two elaborate gilt frames. In the top frame, Biard’s painting appears with the words “Unrecorded” and “Histories” superimposed. As one tries to move one’s cursor near these words, they slide away from one, suggesting the difficult of piecing together the subaltern narratives that dominant history excludes.

The second image, which is partially concealed by the Biard painting of the slave auction, is a medieval illumination in which a European king and queen are receiving visiting dignitaries. Piper presents this image in black and white; however, when one places one’s cursor over this image, the words “concealed” and “presences” appear, inscribed over two figures in the illumination that now, presented in color, appear from their skin color to be of African origin.

By revealing this medieval image of Blacks in the British Isles, Piper challenges the notions of racialized national purity and homogeneity that gained prominence in post-1945 Britain. As Peter Fryer has argued, there were, in fact, Africans in Britain before the English arrived (1). Of course, the Black presence in Britain prior to the substantial waves of immigration that followed World War Two has been routinely denied in order to “whiten” the history of Britain as a nation. Piper’s image underlines the fact that exchanges with Africa were a feature of medieval life. In addition, this section of Unrepresented also suggests that the forms of hierarchy that characterize later representations of African identity were far less of a feature in images that preceded the rise of the Atlantic slave trade. Janet Abu-Lughod’s discussion of Europe as a relatively peripheral part of a series of overlapping regional cultural and economic systems during the late medieval period provides a useful corrective to such representations of the colonial era. This history was, of course, written out as Europe achieved global dominance and cultural and genetic theories of superiority arose to legitimate projects of colonial rule.
While the Biard painting opens out onto four discrete virtual archives in its CD-ROM incarnation, one of them resonates particularly powerfully with the points I’m developing here concerning the historical use of technology for the purpose of classifying and containing racial alterity. In the archive entitled “Fictions of Science,” we are presented with the image of a black male body posed in the quadrilinear position of Da Vinci’s famous engraving, which become an icon of Renaissance humanism. Here, however, instead of marking a celebration of inquiry into the transformative capacity of the self and of culture, the black body is superimposed on a grid within which the various branches of modern science and social science appear. As one moves the cursor over this field, it is transformed into the characteristic cross-hairs of a gun sight. The contemporary manifestations of state violence that formed the subject of much of Piper’s work during the 1980s are here juxtaposed with historical instances of colonial power. Supposedly objective scientific disciplines are presented as directly complicit with classificatory and, in many cases, exterminatory forms of knowledge.

Clicking in any of these zones leads to a fade out and an animation that first defines a particular branch of science - including sociology, craniology, ethnology, biology, technology, genealogy, theology, and anthropology - and then provides one with a particular instance of the historical use of such sciences as part of a project of classifying racial alterity in the colonial context. This critique of the social sciences’s complicity with colonial power has become well known since Talal Asad’s ground-breaking work on the topic. However, simply by placing contemporary social “sciences” like anthropology in a grid with now discredited and defunct cognates like craniology, Piper makes a telling point concerning the historical origin of such disciplines. Yet his work also develops a critique of the mode through which such disciplines operate. A click on the “anthropology” grid, for instance, first provides one with a dictionary
definition of the discipline which emphasizes its putative objectivity: “n. the study of man, his origins, physical characteristics, institutions, religious beliefs, social relationships, etc.” One then zooms in to a box-like area, with the clicking sound of a camera lens again placing the computer user in the uncomfortable position of the device of classification. Black and white images of people from colonized lands in Africa, Australia, and South Asia, all of whom evince no signs of “contact” with the West, pan before one’s eyes. Their difference is rendered as absolute, their nudity an index of their supposed cultural backwardness. At the end of this pan, an image of a bare-breasted Aboriginal woman materializes. She is framed by an instrument for measuring the circumference of her head, part of the apparatus through which the late imperial science of craniology claimed to provide direct physical explanations, grounded in social Darwinian precepts, for the putative inferiority of non-European peoples. Over this image, the following words gradually materialize: “The exercise/of the power/to name.”

By reminding us of the historical complicity of nominally scientific disciplines such as anthropology in the project of colonial expansion and classification, Piper’s work underlines the now familiar but enduringly controversial notion that science and technology are socially constructed. Drawing our attention to the development of disciplines such as anthropology, sociology, and biology within the context of the colonial demarcation and containment of difference, Piper maps the lineage of contemporary forms of power and representation. Piper’s work makes apparent that it is not only as a result of convenient forms of historical amnesia that new technologies such as cyberspace can be engaged in the patently utopian terms of cyber-libertarian discourse. Moreover, the fact that one enters the portals I’ve been discussing through a space that reproduces the sanitized precincts of a museum is itself significant. The CD-ROM on which Piper’s exhibition is archived displays these three portals as the three connected halls
of a museum. This is a highly appropriate visual image, since it not only reproduces the gallery context in which Piper’s installations are normally shown, but also draws attention to the mechanisms of colonial representation at work in the traditional museum. As Mary Louise Pratt and James Clifford, among others, have argued, the museum functions as a “contact zone,” a site where previously separate subjects are brought into spatial and temporal contiguity and organized, through the structure of the collection, into a set of hierarchical relations (192). Piper’s work is in clear consonance with this opening image of the museum since it is predominantly focused on technologies of representation and classification. By placing us inside the sanitized confines of a virtual archive, Piper sets up the representational codes whose underlying power relations his work teases out and criticizes.

Documenting the Scanscape

Keith Piper explores the contemporary impact of colonial technologies of representation in *Unclassified*, the ironically titled virtual space that occupies the right-hand virtual gallery of *Relocating the Remains*. Here Piper engages the spectator in a scathing reenactment of the structuring role of difference in the brave new world of high tech. In particular, this section provocatively connects the inequality of access to electronic communications that is a product of contemporary socio-economic conditions to novel forms of control that are enabled by contemporary technology. Piper’s concerns are rooted in recent British history, which has witnessed a number of massive urban uprisings in response to intensified forms of police surveillance within predominantly black communities. The infamous ‘SUS’ (for Stopped Under Suspicion) laws, enforced in a racist manner during the late 1970s of 1980s by the police to allow the arrest of anyone whom they suspected of illegal actions, trapped members of Britain’s
black population in particular in the cross-hairs of an increasingly militarized police force. While community protests in Britain have led to substantial reforms of such policing practices – ironically making them more invasive and racist in many cases –, the growth of increasingly sophisticated forms of electronic surveillance has resulted in the ongoing intensification of what Mike Davis has suggestively called the “scanscape” of urban space (366). Casting an invisible net over physical space, newly developed electronic modes of surveillance such as the FaceIT technology I described earlier raise particularly discomforting questions about privacy, civil rights, citizenship, and egalitarian access to public space.

Piper’s attention in *Unclassified* focuses in particular on the use of technologies of surveillance to fix the black subject in space. InIVA’s Keith Piper website presents one with an animated sequence of pictures labelled *Unclassified Presence*. These pictures roll over from a picture of a photojournalist at work at a demonstration, to an image of a CCTV (Closed Circuit Television) In Operation sign, to, finally, a police riot squad. Part of a series of works done by Piper that focused on the contemporary city, this section of the archive lays out the relation between discourses of public order and the racialization of space. The scrolling sequence of images he provides us with at the entrance to this portal identifies the interwoven agencies of representation, control, and surveillance that turn the city into colonial space for non-white subjects. Physical mobility in the space of the city has become increasingly difficult for Black Britons as their presence has come to be identified with a generalized threat to the maintenance of public order. The origins of the contemporary scanscape in Britain go back at least thirty years. As Stuart Hall and his colleagues at Birmingham’s Centre for Contemporary Cultural Studies argued in their classic *Policing the Crisis*, an economic downturn and social
fragmentation during the 1970s in Britain provoked the rise of an ideology based on law and order. The moral panics concerning lawlessness that proliferated during this period helped, according to Hall and his collaborators, to legitimate a harshly intolerant and draconian new state form. Racially-biased policing practices and the widespread rioting that they provoked during the 1980s did much to confirm Hall’s argument that popular consent was increasingly being garnered through the exercise of coercion against Black Britons (322). A self-magnifying feedback loop was established during this period between scapegoating media representations of ethnic minorities, increased police surveillance, and outright state violence directed towards Black communities. This institutional racism in turn produced violent resistance on the part of blacks, who were left with few other avenues to express their discontent with the media stereotype of the “black criminal” and abusive policing practices. The scrolling images in Keith Piper’s work, which include components of each segment of this feedback loop, highlight the enduring saliency of Hall’s analysis.

Piper’s *Unclassified* adds to Hall’s dissection of popular authoritarianism, however, by focusing on the role of the visual in contemporary schemes of classification. Visible somatic characteristics have always played a key if not exclusive role in defining racial difference. In the late nineteenth century, however, corporeal differences gained in significance as photography displaced print language as the primary arbiter of universal knowledge (McClintock 123). Photography offered the nascent fields of anthropology and criminology a means for classifying racial and class differences. The rise of digital encoding over the last decade has raised the stakes in this process of rendering difference visible. Powerful new visual technologies render the topography of individual faces and bodies part of the contemporary scanscape. In the context of increasingly hostile attitudes towards non-white populations, these new technologies of the
visual threaten to undermine civil rights substantially. For instance, computerized databases now allow police officers in Europe to access continent-wide files profiling suspected illegal immigrants. These files were set up by the Trevi group, a coalition of police forces from member nations of the European Union whose original remit to cooperate around anti-terrorism activities has now been expanded to cover immigration, visas, asylum-seekers, and border controls. Since the Trevi group operates autonomously from the EU parliament, there is no public brake on the use of computer databases by this branch of the state. As Tony Bunyan has observed, the British equation of blacks with crime, drugs, terrorism, and illegal immigration has now been expanded to encompass the entire European Union (19).

Keith Piper’s work focuses explicitly on these issues of visuality and the body. Passing through the portal in Unclassified that I’ve been discussing, one is presented with a small image of a black man’s face. This image is a composite one, made up of the fragmented pieces of many different men’s faces. Rendered as a generic threat, this black man’s face is set against a large radar screen, with fingerprint files as a background. As one moves one’s cursor towards this image, it skids hectically away across the radar screen. The sweeping arm of the radar scan slams into these nomadic faces, causing them to gyrate more frenetically while the display emits a loud beeping sound. Just as was true in the Unrecorded section, contemporary technologies of representation are presented here as objectifying their subjects. In addition, such technologies integrate the subjects they focus on into an economy of control that represents such subjects as inherently “other,” and consequently legitimate their subjection to the acts of casual brutality and exploitation that characterize Europe’s colonial history and contemporary racism. The persistence of colonial discourse in contemporary digitally-enhanced surveillance technology
should at the very least provoke a reexamination of assertions of the value-free nature of such technologies when deployed in the segregated spaces of today’s cities.

In the context of the European Union’s Schengen Accords, the imposed alterity of non-white communities represents an explicit threat to a freshly minted European continental identity. As A.Sivanandan has noted, the nation-states of Europe drew on one another’s specific national racisms as they consolidated a continent-wide notion of European citizenship, pulling one another down to a very low common denominator (69). As a result, Article 116 of Germany’s constitution, which notoriously bases citizenship exclusively on blood, has become the implicit standard of belonging across the EU. In a background note to *Tagging the Other*, the portion of the CD-ROM that deals with contemporary surveillance technology, Keith Piper writes of this situation:

As the internal borders between nation-states are dismantled, the ‘hard outer shell’ defending Europe from infiltration by the non-European ‘other’ is reinforced. As part of this process, at those points at which that ‘infiltration’ has already taken place, and whole communities of ‘otherness’ have consolidated themselves, new techniques of surveillance and control are being implemented. It is the points at which new technologies are being implemented to fix and survey the ‘Un-European Other’ in the faltering consolidation of this ‘New European State’ which forms the basis of *Tagging the Other*. Central to the piece is the framing and fixing of the Black European under a high tech gaze which seeks to classify and codify the individual within an arena in which the logical constraints of race, ethnicity, nation, and culture are fixed and delineated in a discourse of exclusion.

If the new discourses of European identity work to criminalize both illegal immigrants and legitimate Black nationals, this criminalization takes place increasingly through digital technologies that emplot people of color within visual schema of reified difference. While the SUS laws limited black people’s access to public space by promoting draconian policing policies during the 1970s and ‘80s, today’s digital technologies continue to operate on similar spatial planes while also bringing a microscopic gaze to bear that turns all of Europe into a unified
scanscape. Panglossian readings of harmony through technology ill prepare us to understand this social context. Keith Piper’s *Relocating the Remains* suggests that the interlocking axes of spatial, visual, and informational control at work in the contemporary Euro-American scanscape need to be understood within the much broader historical context of racialized slavery, colonialism, and neo-colonialism.

**Code=Power**

The need to historicize contemporary communications technologies that I’ve been underlining in relation to Keith Piper’s work is echoed in Lawrence Lessig’s recent discussions of the architecture of the Net. For Lessig, a professor at Harvard’s Law School’s Berkman Center for Internet and Society, the constitutive regulatory forms of cyberspace are unavoidable; the digital domain cannot, therefore, be thought of as an open frontier (5). Indeed, Lessig argues that “left to itself, cyberspace will become a perfect too of control” (6). Unlike libertarians such as Barlow, in other words, Lessig is alive to the multiple potentially dominating as well as enabling structures that operate in cyberspace today.

Perhaps the most important contribution made by Lessig is the relatively simple observation that such forms of control are built into the computer code through which the Net operates. Other modes of social regulation such as laws, social norms, and economic forces are shaped in cyberspace by the basic codes through which the Net functions, Lessig argues (88). While cyber-libertarians celebrate the rhizomic social forms enabled by the Net’s current architecture, Lessig discerns significant moves among both contemporary technicians and politicians away from the relatively open structure that characterized the Net’s protocols in its formative stages. For Lessig, the determining factor behind these trends is the shift from a world
in which code was “corporate in a political sense” to one in which it is “corporate in a 
commercial sense” (207). Commodification of the Net, in other words, is likely to foster 
increasing forms of control through code. What values will be embodied, Lessig asks, in the 
future architecture of the Net and how can we deter those wishing to use the Net to curtail rather 
than expand civil liberties?

One particularly unnerving example that Lessig provides of moves to use code for 
purposes of control in a U.S. context is the Clinton administration’s dogged attempt to regulate 
encryption technology on the Net ("Laws of Cyberspace"). This struggle has taken the form of 
moves to legislate a key recovery ability that would give government agents access to the content 
of communications on the Net. Not only would this be an indirect manner of regulating behavior 
on the Net, but it would also allow the government to identify the sender of a particular message. 
Federal agents could thereby essentially establish a system of electronic passports, using decoded 
messages to determine vital elements of personal information about the individuals concerned. 
Since the U.S. is by far the most significant global developer of computer technology, federal 
legislation along these lines would virtually automatically become a standard element of future 
software distributed around the globe. As Lessig underlines, the U.S. constitution may restrain 
to some degree the Federal government’s ability to use such technology illicitly, but this is 
unlikely to be true of every state that deploys the software. In this case, a change in a 
fundamental element of the code or architecture of the Net within the U.S. has sweeping 
ramifications for civil liberties around the world. The system which would result from such a 
minor modification, one that would allow constant, invisible, and perfect tracking and 
monitoring of particular individuals, would be chillingly efficient. While Lessig’s cautionary 
examples might seem to jibe with a cyber-libertarian fear of the state, he employs these examples
to call for informed public intervention in the often abstruse contemporary debates concerning the architecture of the Net.

In addition to the kinds of concerns about civil liberties raised by Piper and Lessig, digital surveillance in the realm of business and commerce is also increasingly worthy of critical scrutiny. As Christian Parenti reports in a recent article, 80 percent of US corporations keep their employees under regular surveillance according to the American Management Association. Electronic eavesdropping is becoming an ever more prominent component of the American workplace. Instead of eradicating hierarchies as the proponents of the New Economy argue, new technologies are “pushing social relations on the job toward a new digital Taylorism, where every motion is watched, studied and controlled by and for the boss” (Parenti 26). High-tech surveillance is being used not simply to nab employees for “inappropriate Internet use” such as “porn surfing, gambling, online video gaming and chat-room socializing”, but also to foil efforts to organize the new “flexible” workplaces of the 21st century (Parenti 28). In addition to these forms of on-the-job monitoring, computer technology of course makes it possible to track all of our decisions as consumers of material goods and information online. As everyone who has received irritating junk email knows, online merchants monitor our mouse clicks using “cookies,” creating a profile of our interests and buying habits which is then in turn often sold to marketers. As individuals, we have very little control over this flow of commodified information about ourselves. In fact, the economist Hal Varian recently observed that “there is already a market in information on you; the trouble is, you aren’t a participant in that market” (Lohr). The questions concerning privacy that arise from such uses of technology are an increasing public concern in the US, one likely to be heightened by police use of the digital surveillance
technology I described at the outset of this article. Such technologies appear to be ushering in an ever-more Foucauldian world of panoptical surveillance.

The parallel between the role of contemporary technology as understood in the work of Piper and Lessig and that of Bentham’s panopticon during the nineteenth century has already been drawn by Mark Poster (291). For Poster, the database is a perfect cyberspatial version of Bentham’s architecture of discipline and punishment, one that uplinks our physical and social identities into a vast system of perpetual surveillance. It is indeed ironic that such a system of control should be one of the facilitating forces behind the globalization of contemporary capitalism. Academic as well as media accounts of globalization are dominated by metaphors that suggest the fluidity of contemporary social and economic relations. How do such accounts correlate with the extension of surveillance technologies I’ve been describing?

Manuel Castells’s account of the social transformations that have accompanied the rise of the information society acknowledge the enhanced facility and velocity with which information flows in globalized capitalism. Far from being a technological determinist, however, Castells argues that technology merely serves as the handmaiden of the broader set of social changes associated with the capitalist restructuring that has taken place in most societies since the 1970s. Faced with the “stagflation” of the 1970s and aided by the development of new telecommunications technologies, corporations were able to shift production processes to parts of the globe where labor costs were low while command and research facilities were concentrated in the increasingly global cities of the overdeveloped world (Lazarus 100). According to the useful analysis of Regulation School theorists, labor’s weakened position meant that capital could impose more stringent market discipline through the international “de-regulation” in flows of trade and finance capital. The upshot has been a rejection of the welfare state that
characterized the “Fordist” era and the creation of a new, “flexible” regime of accumulation. With information as its chief economic resource, contemporary capitalism has been freed from the constraints imposed by the organized working class in developed nations and has embarked on footloose expansion around the globe bolstered by the resurgence of free-market economics and neo-liberal ideology (Lazarus 100). It should be stressed that the state, far from withering away as so many neo-liberal commentators as well as some academics seem to argue, has been the agent of this transformation, making it possible for transnational corporations to evade and divest themselves of national regulations (Sivanandan “Globalization”, 10).

In a classic example of combined and uneven development, urban space has been riven by this transformation to a post-Fordist regime of accumulation. According to Castells, an increasingly stark divide has arisen between a core labor force with high skills and the “mass of disposable labor”, who live in conditions of increasing marginality (33). As the rising importance of information technology leads to a greater social emphasis on access to knowledge, the information poor also lose their ability to garner material resources and the urban system becomes increasingly divided between the luxurious compounds housing the highly educated elites and the impoverished zones inhabited by the de-skilled masses. In a bitter irony, the networking of society has thus taken place in conjunction with the spread of the polarized social conditions of what Castells calls the “dual city.” The proliferation of “gated communities” in the U.S. suggests the extent to which the elites in the information society are withdrawing into fortified enclaves. A necessary corollary of this withdrawal is the transformation of the remaining public spaces into the panoptical space of the scanscape, as the kinds of powerful new surveillance technologies I’ve described are used to contain potential threats from the socially marginalized but economically essential masses who service the elite of the global cities. The
spread of such technologies despite the economic boom of the late 1990s suggests the degree of paranoia at play in the dual city. As Anthony King has trenchantly observed, the global city has increasingly come to resemble the colonial city, with its manichean spatial, social and economic encasements. Keith Piper’s practice of examining the correspondences between colonial discourses and the conditions that obtain in the dual city is not then as far fetched as it might initially seem.

Globalization has, in other words, meant heightened mobility for a small but terrifically powerful elite around the world. For an increasingly large percentage of the population within both underdeveloped and developed nations, it has meant fixity, an anchoring in particular places from which capital and, often, hope have been drained. Draconian institutions of control have proliferated as nations throughout the developed world have become more internally polarized and unstable. A bleak riposte to the images of spatial mobility embodied in the cyber-libertarian frontier mythology, the contemporary prison industrial complex is, according to Zygmunt Bauman, a factory of exclusion. The significant segment of the population (2% in the case of the U.S.) who are not needed as producers and for whom there is no (legal) work to return to are effectively disposed of in the prison industrial complex, a condition that, as Bauman comments, amounts to burial alive (113).

Alongside the proliferating inequality within developed nations as well as between these developed nations and the vast majority of humanity has come an increasing privatization of information. The mixed economy of state-private information provision that characterized the Fordist era has declined and capitalism has moved in to trade in and profit from informational goods (Kundnani 55). The decline of the public service ethos in broadcasting is but one example of this shift. Nevertheless, there is a central contradiction at play in this new dispensation. Since
digital technologies can duplicate information instantaneously, without loss and at zero cost, the only technical constraint on the free flow of information today is intellectual property law. In order to secure profits, therefore, information capitalism must place increasing emphasis on enforceable world agreements on copyright violation. Information-exporting nations like the U.S. have, as a result, increasingly intervened to set up global regulatory regimes around the world, many of which infringe upon and actively militate against age-old traditions of community ownership of information (Kundnani 56). Information in this context must be construed in the broadest possible manner, from the traditional folk music forms that are sampled by “worldbeat” artists to the genetic code of Third World seed stocks and indigenous peoples that American companies have recently tried to patent. As the right to access and control information becomes increasingly central to the global social order, circuits of communication that retain a non-commodified character are likely to become increasingly embattled.

The creation of the Net does constitute a significant countervailing force to this new informational world order. However, the libertarian discourses that characterize many recent discussions of the Net and the “New Economy” it has driven are woefully inadequate for assessing and combating the complex contradictions that are straining the contemporary social fabric. The Net is not simply affected by the forms of social inequality that characterize our increasingly bifurcated world. Rather, it is an element in a broader technological transformation that is helping to produce these very forms of polarization. Despite the democratizing aspects of its architecture, it is also susceptible to transformation from a tool for the proliferation of new forms of citizenship to one of control. Cyberspace will undoubtedly play a pivotal role in the world of the future. Indeed, since its popularization in 1994, the Net has already become the central nervous system of contemporary culture and economy in the overdeveloped world. As
my comments here have shown, we cannot take the current code of the Net and the entitlements associated with this architecture for granted. Given this fact, I believe there is an urgent need for a social movement around the right to significant forms of public control over communication. It is imperative that the current hegemony of knee-jerk anti-government ideology be challenged, particularly in regard to contemporary communications technology. While many issues need to be engaged by such a movement, from the concentration of media ownership to the future of intellectual property law, to name just two examples, the kernel of any such movement has to be the articulation of alternatives to the current anti-social neo-liberal status quo. As Raymond Williams put it in his bracing short book Communications,

> our commonest economic error is the assumption that production and trade are our only practical activities, and that they require no other human justification or scrutiny. We need to say what many of us know in experience: that the life of man (sic), and the business of society, cannot be confined to these ends; that the struggle to learn, to describe, to understand, to educate, is a central and necessary part of our humanity (11).

Wildly idealistic words in the current political climate, perhaps. But initiatives such as the open code movement, a recently vitalized outgrowth of some of the same emphases on accessibility that are responsible for the Net’s current architecture, suggest the continuing appeal and practicability of such a counter-hegemonic model of human experience and exchange.18 While a discussion of the open code movement does not fall within the bounds of this paper, suffice it for the moment to say that if this and other such movements to democratize communications technology are to have substantial impact, a significant transformation in current attitudes towards such technology will have to be effected. It is through rearticulating the model of communications as a site of collective identity and responsibility, of equal access and empowerment advanced by figures such as Raymond Williams, that we may hope to initiate such a transformation.


Hall, Stuart et. al., eds. Policing the Crisis: Mugging, the State, and Law and Order. Houndmills, Basingstoke, Hamps; Macmillan Education, 1978.


Endnotes

This surveillance system and the debate it has occasioned is described by Dana Canedy in “Tampa Scans the Faces in Its Crowds for Criminals.”

2. For a detailed history of the BLK Arts Group and its impact on the visual arts in Britain, see Rasheed Araeen’s essay in The Other Story.

3. For an extended discussion of Toffler, Bell, and other post-industrial utopians, see Boris Frankel.

4. Friedrich Kittler’s work on the epistemic characteristics evoked by previous technologies is informative in this regard. See his Discourse Networks.

5. For a fascinating discussion of the recurrence of colonial discourses of alterity in the context of the contemporary high tech production sector, see Terry Harpold and Kavita Phillips’s “Of Bugs and Rats.”

6. Additional details concerning this painting may be found at the following two websites: <http://www.pbs.org/wgbh/aia/part1/1h297.html> and <http://www.hullcc.org.uk/wilberforce/explore_staircase2.html>.

7. See Rohini Malik’s brief but very suggestive discussion of Piper’s use of fragmentary texts to challenge linear constructions of history and identity in his “Introduction” to Piper’s Relocating the Remains.


9. This reminds one of Gayatri Chakravorty Spivak’s contention that subaltern histories are not as easily recuperable as the work of the Indian Subaltern Studies group would suggest. See her “Subaltern Studies: Deconstructing Historiography.”
For a discussion of such regimes of classification, see Anne McClintock’s *Imperial Leather*.

The Sokal Affair offers abundant evidence of contemporary resistance to the notion of science’s historical inscription.

The first and still one of the best discussions of the “popular authoritarianism” of this period may be found in Stuart Hall et. al., *Policing the Crisis*.

In 1989, the European Union parliament passed a resolution saying that the Schengen Accord, which “harmonizes” EU policies on visas and coordinates crime prevention efforts (which include policies for dealing with asylum-seekers), constitutes a potential detriment to civil rights.

To take but one example, a council of judges from the United States Court of Appeals for the Ninth Circuit recently ordered their technology staff to disconnect a monitoring program that had been installed on court computers in protest over privacy issues. See Neil A. Lewis, “Rebels in Black Robes Recoil at Surveillance of Computers.” *The New York Times* Wed, 8 Aug 2001: A1, A12.

Arjun Appadurai’s influential work on the non-isomorphic flows of information, capital, and populations round the globe is but one prominent example of such rhetoric.

For a complementary account of globalization, see Anthony Giddens, *The Consequences of Modernity* and *Runaway World*.

For a discussion of the open code movement, see David Bollier, “The Power of Openness.”